

ABSTRACT OF THE DISCLOSURE

A current to voltage conversion circuit for improving the speed of a photoelectric conversion device and frequency characteristics of an amplifier by improving a method for switching the gain of an amplification circuit for a photo detector integrated circuit (PDIC). Photocurrent generated in the photoelectric conversion device, such as a photodiode, is transferred to the amplifier by means of current mirroring, so as to raise a bias voltage to the photoelectric conversion device and enhance a response speed thereof. Further, the amount of current generated in the photoelectric conversion device is adjusted through control of a resistance ratio of a current mirror circuit. Therefore, a fixed feedback resistor can be used for the amplifier irrespective of modes, so as to enhance frequency characteristics of the amplifier.